Requirement:

If the singer had sungs the songs. update the singer bio field with the number of songs sung by the singer.

Example.

If singer2 is had sung 2 songs.

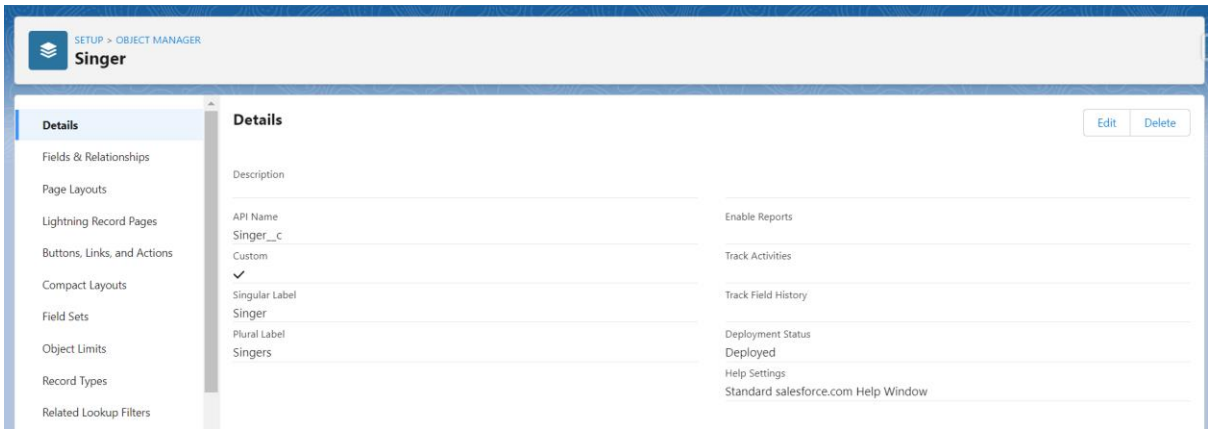
Current Bio on singer record: This is Singer2. This is my bio.

Expected Bio on singer record:Total number of songs sung by Singer2 is 2.

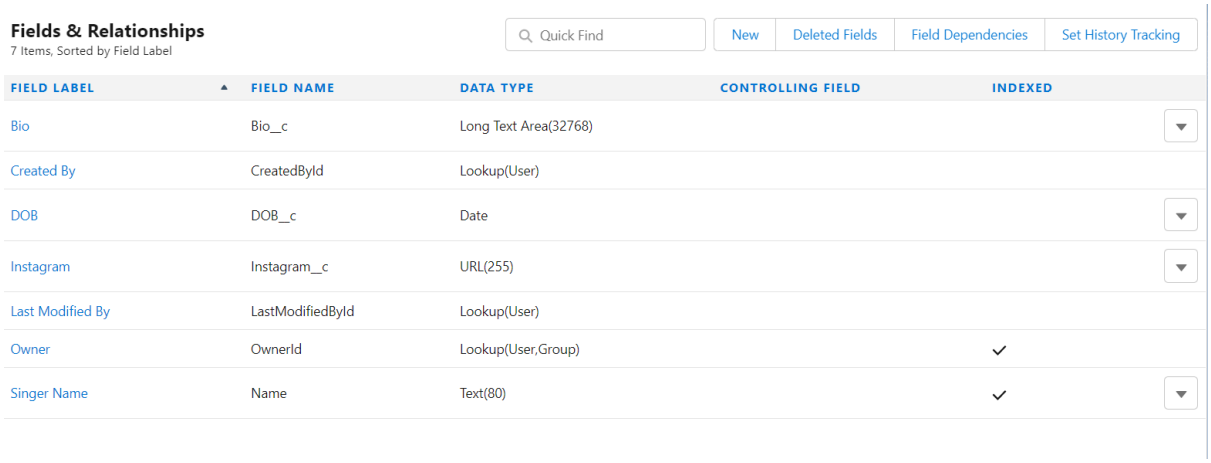
Summary of the requirement: Get the count of the child records connected to the parent record and update the count in the parent field

Setup:

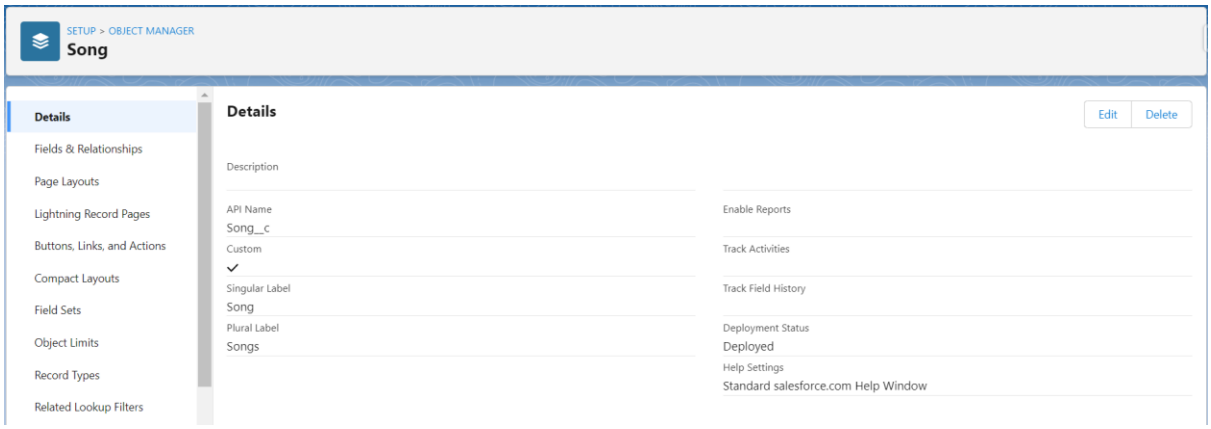
Singer object:



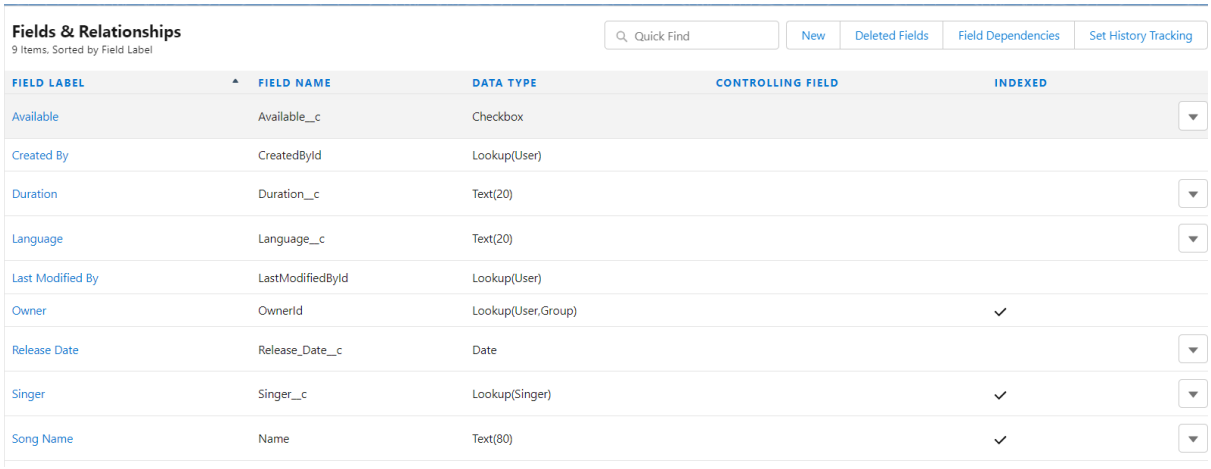
Field under the singer object



Song object



Fields under song object



Now, give it a try.

Note: Singer and song object are connected via lookup but not with the master detail. If they are connected via master detail. We can make use of roll up summary field to get the count of the records.

```
1.  //created a Map to hold on the singer id and count of songs sung by the singer.
2.  // key - singer id
3.  //value - Integer - to hold the count of records.
4.  Map<Id,Integer> songIdToCountOfSongs = new Map<Id,Integer>();
5.  // created a list to hold the singer records to update
6.  list<Singer__c> lstUpdateSinger = new List<Singer__c>();
7.
8.  // idea is to build the map to hold the id of the singer and count of the song sung
    by the singer.
9.  // we are building the map as we need to update the count of songs on the singer
    object.
10. // using for loop we are iterating over the list of songs in the org. note: it is
    not good practice to get all records without filters. we are doing just for our
    exercise.
11. for(Song__c song:[select id,Singer__c from Song__c ] ){
12.     // check if the map has the singerid (key) in the map. if it not. it is a new
    entry into the map. so set the count for the singer id as 1.
13.     // if the singer haven't sung any songs. no records would be fetched from the
    query.so the map would have the singer entry.
14.      if(!songIdToCountOfSongs.containskey(song.singer__c)){
15.        songIdToCountOfSongs.put(song.singer__c,1);
16.      }
17.     else{
18.        // if the map has the singer id in it. we need to increment the count of the
    song.
19.   // use get method to fetch the count of the song for the given singer record.
20.          songIdToCountOfSongs.put(song.singer__c,songIdToCountOfSongs.get(song.sing
    er__c)+1);
21.      }
22.
23. }
24. //now we have the map which has singer id and corresponding count of songs sung by
    the singer.
25. //plan is to use this map. to update the bio field of the singer.
26. // using the query select id,bio__c,name from Singer__c to get all singers. note:
    as a best practice add filter to the query.
27. for(Singer__c singer:[select id,bio__c,name from Singer__c]){
28.   // check if the map songIdToCountOfSongs is not empty.
29.    if(songIdToCountOfSongs!=null && !songIdToCountOfSongs.isempty()){
30.       // check if the map contains singer id. if yes, update the bio field
    accordingly. if there is no singer id in the map. we are not updating the bio of
    the singer.
31.       if(songIdToCountOfSongs.containskey(singer.id)){
32.          // check if the singer bio has already total number of songs updated.
    why? because we don't want to update the bio with repeated information.
33.         /* give a try to understand what would happen if we remove if and else
    logic and simple add the logic in the code.
34.          * singer.bio__c =  singer.bio__c+ ' '+ 'Total number of songs sung by
    '+singer.name+' is '+songIdToCountOfSongs.get(singer.id);
35.               lstUpdateSinger.add(singer);
36.          * hint: you will see the bio would be update with Total number of songs
    sung by singer1 is 6. Total number of songs sung by singer is6. everytime you run
    the code.
37.          */
38.         //hence, check if the total is already present in the bio or not.
39.         //if it is not, add the Total number of songs sung by to the bio.
40.           if(!((singer.bio__c).Contains('Total')) ){
41.               //use get() method, songIdToCountOfSongs.get(singer.id) to get the
    count of the songs sung by the singer.
42.                singer.bio__c =  singer.bio__c+ ' '+ 'Total number of songs sung by
    '+singer.name+' is '+songIdToCountOfSongs.get(singer.id);
43.             // add the recods to the list to use bulkification.
44.               lstUpdateSinger.add(singer);
45.           }else{
46.             // if the total number of songs info is already present in the bio. we
    need to only update the count of the songs sung by the singer.
```

```
47.             // so we need to remove the old value and update the latest value.how
    to do it. use the substringBeforeLast method.
48.             // substringBeforeLast(separator) -Returns the substring that occurs
    before the last occurrence of the specified separator.
49.                 string tmpString = (singer.bio__c).substringBeforeLast('is');
50.             // tmpString hold the following value for singer2. This is Singer2.
    This is my bio. Total number of songs sung by Singer2.
51.                 system.debug('tmpstring'+tmpString);
52.             // getting the latest count for the singer from the map
    songIdToCountOfSongs and appending the value to the tmpstring.
53.                 singer.bio__c = tmpString+ 'is
    '+songIdToCountOfSongs.get(singer.id)+'.';
54.                // add the recods to the list to use bulkification.
55.                 lstUpdateSinger.add(singer);
56.             }
57.         }
58.
59.       }
60.     }
61.
62.
63. //check if the lstUpdateSinger is not empty.
64. if(lstUpdateSinger!=null && !lstUpdateSinger.isempty()){
65.   // Update DML on collection lstUpdateSinger
66.     update lstUpdateSinger;
67. }
```

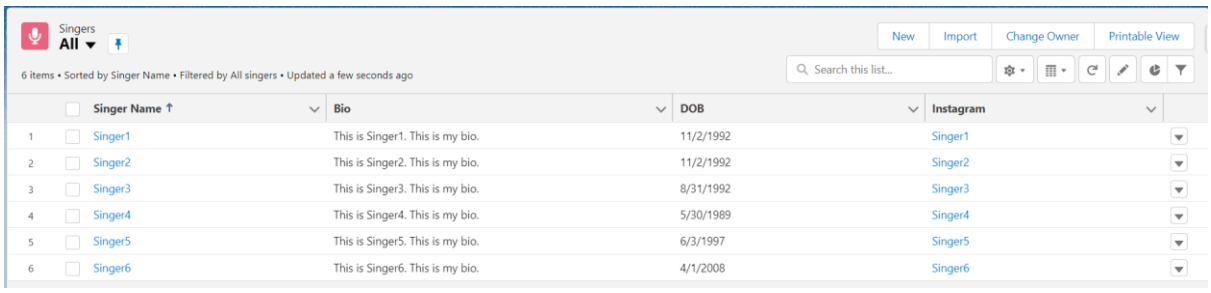
Note: please don't copy paste the code and execute it. Write your code and compare it. That is how you can learn coding in a better way.

Where to execute the code.

Open the developer console and then anonymous window. Click on execute.

Check the results.

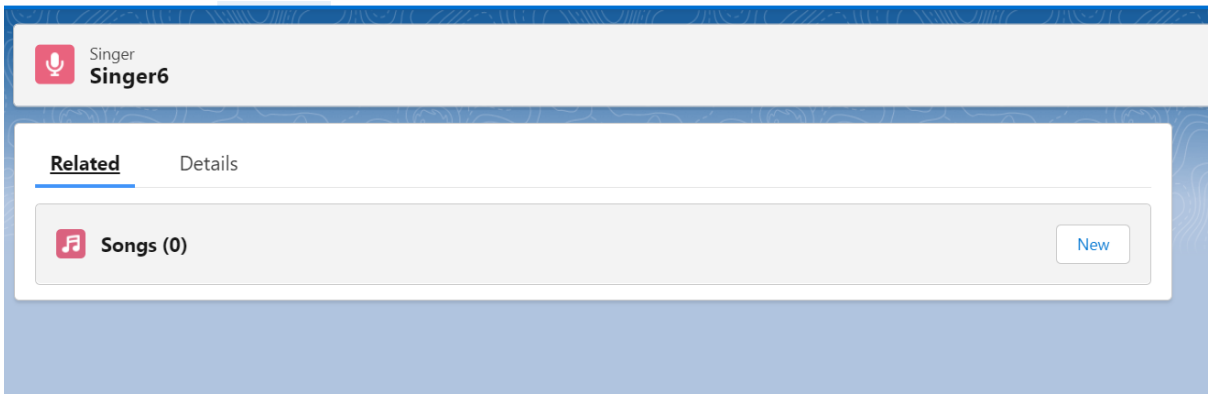
List of singer records in my org. there are 6 singers.


Singers
All
New
Import
Change Owner
Printable View
6 items • Sorted by Singer Name • Filtered by All singers • Updated a few seconds ago
Search this list...
Singer Name
Bio
DOB
Instagram
1 Singer1 This is Singer1. This is my bio. 11/2/1992 Singer1
2 Singer2 This is Singer2. This is my bio. 11/2/1992 Singer2
3 Singer3 This is Singer3. This is my bio. 8/31/1992 Singer3
4 Singer4 This is Singer4. This is my bio. 5/30/1989 Singer4
5 Singer5 This is Singer5. This is my bio. 6/3/1997 Singer5
6 Singer6 This is Singer6. This is my bio. 4/1/2008 Singer6

Opening few records.

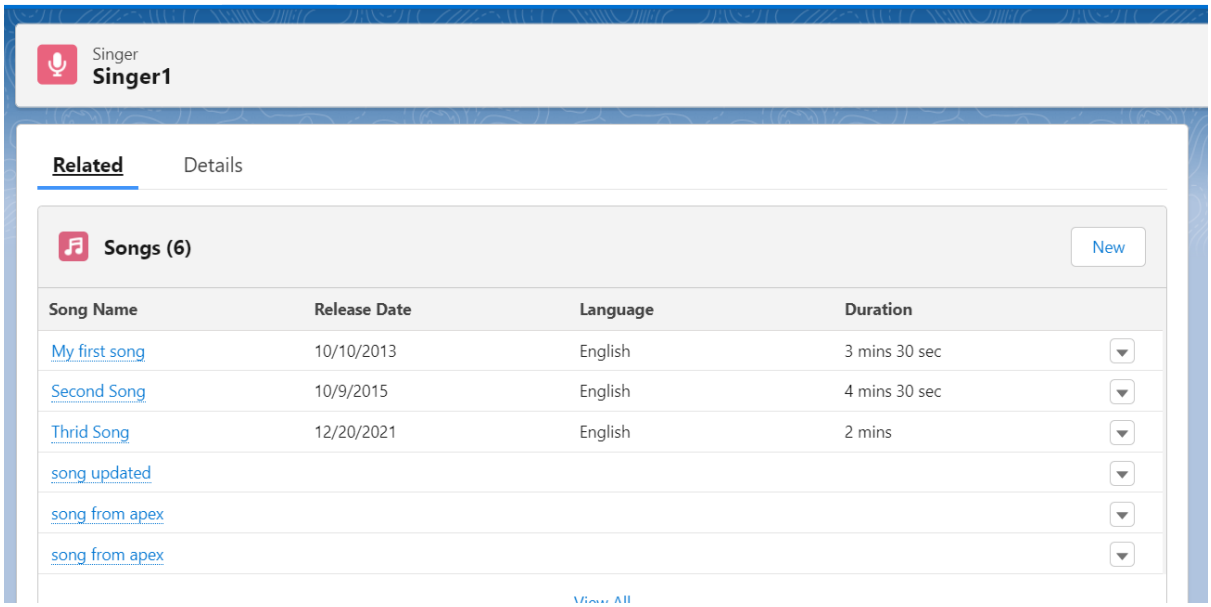
Example: singer6 has sung zero songs.

We can check this from the related list of the singer6.



Singer1 has sung six songs.

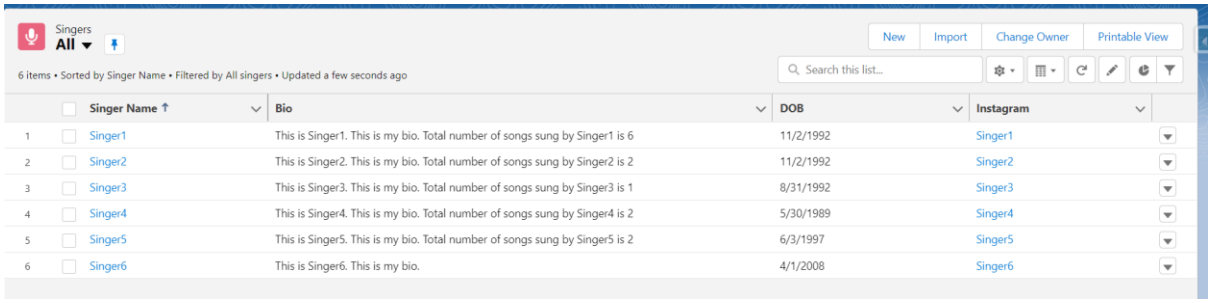
We can check this from the related list of the singer1.



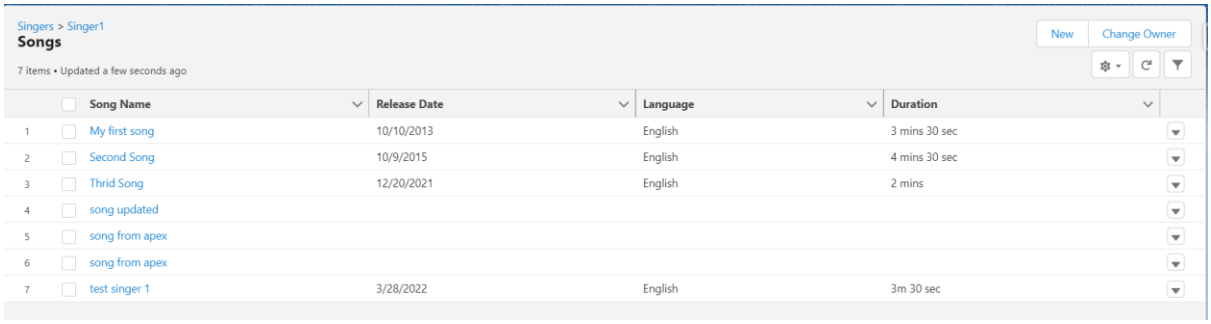
Run the code and check the resulst from the list view.

You can use the query to check the results as well.

Query : select id,bio__c from singer__C


Singers
All
New
Import
Change Owner
Printable View
6 items • Sorted by Singer Name • Filtered by All singers • Updated a few seconds ago
Search this list...
Singer Name
Bio
DOB
Instagram
1 Singer1 This is Singer1. This is my bio. Total number of songs sung by Singer1 is 6 11/2/1992 Singer1
2 Singer2 This is Singer2. This is my bio. Total number of songs sung by Singer2 is 2 11/2/1992 Singer2
3 Singer3 This is Singer3. This is my bio. Total number of songs sung by Singer3 is 1 8/31/1992 Singer3
4 Singer4 This is Singer4. This is my bio. Total number of songs sung by Singer4 is 2 5/30/1989 Singer4
5 Singer5 This is Singer5. This is my bio. Total number of songs sung by Singer5 is 2 6/3/1997 Singer5
6 Singer6 This is Singer6. This is my bio. 4/1/2008 Singer6

Created one more song on the singer1 record. Now there are 7 songs sung by the singer1.

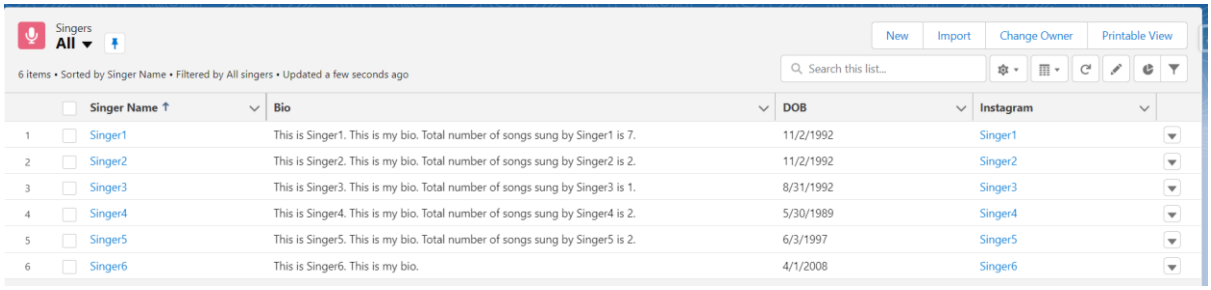

Singers > Singer1
Songs
New
Change Owner
7 items • Updated a few seconds ago
Song Name
Release Date
Language
Duration
1 My first song 10/10/2013 English 3 mins 30 sec
2 Second Song 10/9/2015 English 4 mins 30 sec
3 Thrid Song 12/20/2021 English 2 mins
4 song updated
5 song from apex
6 song from apex
7 test singer 1 3/28/2022 English 3m 30 sec

Ran the code again.

Notice the difference in the singer1 bio.

Earlier it was: This is Singer1. This is my bio. Total number of songs sung by Singer1 is 6

Now it is: This is Singer1. This is my bio. Total number of songs sung by Singer1 is 7.


Singers
All
New
Import
Change Owner
Printable View
6 items • Sorted by Singer Name • Filtered by All singers • Updated a few seconds ago
Search this list...
Singer Name
Bio
DOB
Instagram
1 Singer1 This is Singer1. This is my bio. Total number of songs sung by Singer1 is 7. 11/2/1992 Singer1
2 Singer2 This is Singer2. This is my bio. Total number of songs sung by Singer2 is 2. 11/2/1992 Singer2
3 Singer3 This is Singer3. This is my bio. Total number of songs sung by Singer3 is 1. 8/31/1992 Singer3
4 Singer4 This is Singer4. This is my bio. Total number of songs sung by Singer4 is 2. 5/30/1989 Singer4
5 Singer5 This is Singer5. This is my bio. Total number of songs sung by Singer5 is 2. 6/3/1997 Singer5
6 Singer6 This is Singer6. This is my bio. 4/1/2008 Singer6